§89.202-96

§89.202-96 Definitions.

The definitions in subpart A of this part apply to this subpart. The following definitions also apply to this subpart:

Averaging for nonroad engines means the exchange of emission credits among engine families within a given manufacturer's product line.

Banking means the retention of nonroad engine emission credits by the manufacturer generating the emission credits for use in future model year averaging or trading as permitted by these regulations.

Emission credits represent the amount of emission reduction or exceedance, by a nonroad engine family, below or above the emission standard, respectively. Emission reductions below the standard are considered as "positive credits," while emission exceedances above the standard are considered as "negative credits." In addition, "projected credits" refer to emission credits based on the projected applicable production/sales volume of the engine family. "Reserved credits" are emission credits generated within a model year waiting to be reported to EPA at the end of the model year. "Actual credits" refer to emission credits based on actual applicable production/sales volume as contained in the end-of-year reports submitted to EPA. Some or all of these credits may be revoked if EPA review of the end-of-year reports or any subsequent audit action(s) uncovers problems or errors.

Trading means the exchange of nonroad engine emission credits between manufacturers.

§89.203-96 General provisions.

- (a) The averaging, banking, and trading program for NO_X emissions from eligible nonroad engines is described in this subpart. Participation in this program is voluntary.
- (b) A nonroad engine family is eligible to participate in the averaging, banking, and trading program for NO_X emissions if it is subject to regulation under subpart B of this part with certain exceptions specified in subsection (c) of this section. No averaging, banking, and trading program is available for meeting the HC, CO, PM, or smoke

emission standards specified in subpart B of this part.

- (c) Nonroad engines may not participate in the averaging, banking, and trading program if they are subject to state engine emission standards, are exported, or use an alternate or special test procedure under §89.114–96.
- (d) A manufacturer may certify one or more nonroad engine families at family emission limits (FELs) above or below the applicable emission standard, provided the summation of the manufacturer's projected balance of all credit transactions in a given model year is greater than or equal to zero, as determined under §89.207-96.
- (1) FELs for NO_X may not exceed 14.6 grams per kilowatt hour.
- (2) An engine family certified to an FEL is subject to all provisions specified in subparts B, D, E, G, H, I, J, and K of this part, except that the applicable FEL replaces the NO_X emission standard for the family participating in the averaging, banking, and trading program.
- (3) A manufacturer of an engine family with an FEL exceeding the applicable emission standard must obtain emission credits sufficient to address the associated credit shortfall via averaging, banking, or trading.
- (4) An engine family with an FEL below the applicable standard may generate emission credits for averaging, banking, trading, or a combination thereof. Emission credits may not be used to offset an engine family's emissions that exceed its applicable FEL. Credits may not be used to remedy nonconformity determined by a Selective Enforcement Audit (SEA) or by recall (in-use) testing. However, in the case of an SEA failure, credits may be used to allow subsequent production of engines for the family in question if the manufacturer elects to recertify to a higher FEL.
- (e) Credits generated in a given model year may be used in the following three model years. Credits not used by the end of the third model year after being generated are forfeited. Credits generated in one model year may not be used for prior model years.

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(f) Manufacturers must demonstrate compliance under the averaging, banking, and trading program for a particular model year by 270 days after the model year. Engine families without an adequate amount of emission credits will violate the conditions of the certificates of conformity. The certificates of conformity may be voided ab initio under §89.126–96(c) for those engine families.

§89.204-96 Averaging.

- (a) A manufacturer may use averaging to offset an emission exceedance of a nonroad engine family caused by an FEL above the applicable emission standard. Credits used in averaging may be obtained from credits generated by another engine family in the same model year, credits banked in the three previous model years, or credits obtained through trading.
- (b) Credits scheduled to expire in the earliest model year must be used first, before using other available credits.

§89.205-96 Banking.

- (a) A manufacturer of a nonroad engine family with an FEL below the applicable standard for a given model year may bank credits in that model year for use in averaging and trading in the following three model years. Credits not withdrawn within the three model years after they are banked are forfeited.
- (b) A manufacturer of a nonroad engine family may bank credits up to one calendar year prior to the effective date of mandatory certification. Such engines must meet the requirements of subparts A, B, D, E, F, G, H, I, J, and K of this part.
- (c) A manufacturer may bank actual credits only after the end of the model year and after EPA has reviewed the manufacturer's end-of-year reports. During the model year and before submittal of the end-of-year report, credits originally designated in the certification process for banking will be considered reserved and may be redesignated for trading or averaging in the end-of-year report and final report.
- (d) Credits declared for banking from the previous model year that have not been reviewed by EPA may be used in averaging or trading transactions.

However, such credits may be revoked at a later time following EPA review of the end-of-year report or any subsequent audit actions.

§89.206-96 Trading.

- (a) A nonroad engine manufacturer may exchange emission credits with other nonroad engine manufacturers in trading.
- (b) Credits for trading can be obtained from credits banked in the three previous model years or credits generated during the model year of the trading transaction. Traded credits expire if they are not used in averaging within three model years following the model year in which they were generated.
- (c) Traded credits can be used for averaging, banking, or further trading transactions.
- (d) In the event of a negative credit balance resulting from a transaction, both the buyer and the seller are liable, except in cases involving fraud. Certificates of all engine families participating in a negative trade may be voided ab initio under \$89.126-96(c).

§89.207-96 Credit calculation.

For each participating engine family, emission credits (positive or negative) are to be calculated according to one of the following equations and rounded, in accordance with ASTM E29-90, to the nearest one-tenth of a megagram per hour (Mg/hr). ASTM E29-90 has been incorporated by reference. See §89.6. Consistent units are to be used throughout the equation.

(a) For determining credit availability from all engine families generating credits:

Emission credits=(Std - FEL) \times (Volume) \times (MinPR) \times (10 $^{-6}$)

(b) For determining credit usage for all engine families requiring credits to offset emissions in excess of the standard:

 $\begin{array}{ll} Emission & credits = & (Std-FEL) \times (Volume) \\ & \times (MaxPR) \times (10^{-6}) \end{array}$

Where:

Std=the current and applicable nonroad engine emission standard in grams per brake horsepower hour.

FEL=the family emission limit for the engine family in grams per brake horse-power hour.